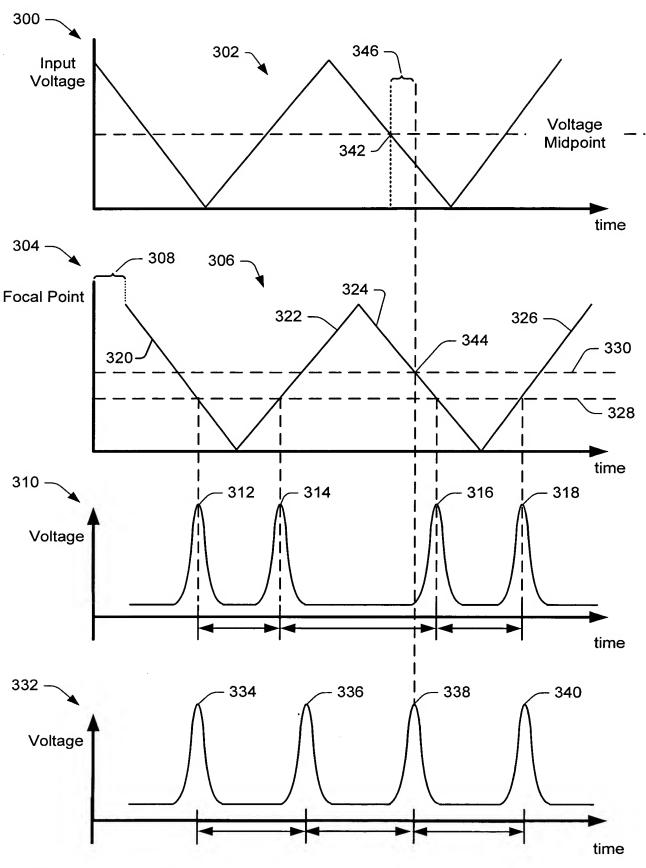
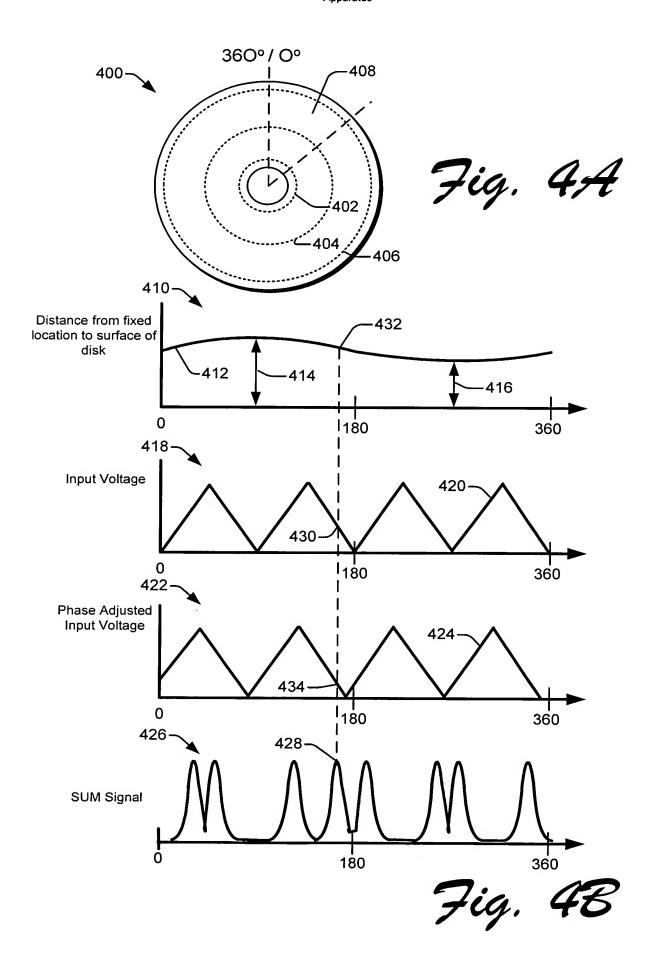
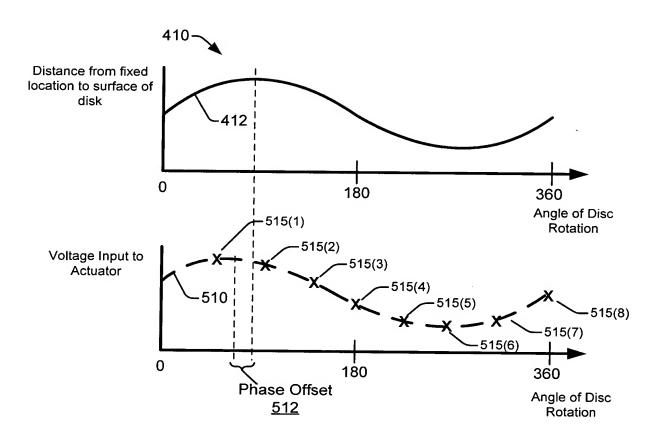


1





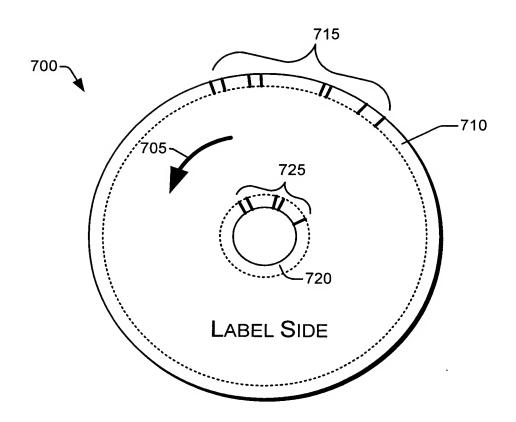


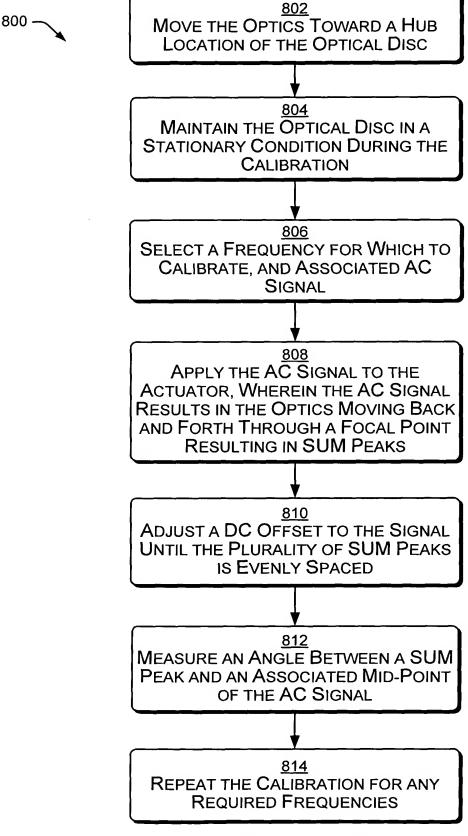
Actuator Phase Lag Calibration Table 298		
Input Signal Frequency <u>600</u>	Phase Lag <u>605</u>	
2 Hz	$\Phi = +2 \deg$	
3 Hz	$\Phi = +4 \deg$	
4 Hz	$\Phi$ = +6 deg	
5 Hz	$\Phi = +8 \deg$	

Fig. 6A

Voltage Data Look-up Table <u>296</u>			
Sector of Disc <u>615</u>	0 <r<1" <u>620</u></r<1" 	1" <r<2" <u>625</u></r<2" 	2" <r<3" <u>630</u></r<3" 
0-44 deg	$V=V_1, \Phi=\Phi_1$	$V=V_9$ , $\Phi=\Phi_9$	$V=V_{17}, \Phi = \Phi_{17}$
45-89 deg	$V=V_2$ , $\Phi=\Phi_2$	$V=V_{10}, \Phi = \Phi_{10}$	$V=V_{18}, \Phi = \Phi_{18}$
90-134 deg	$V=V_3$ , $\Phi=\Phi_3$	$V=V_{11}, \Phi=\Phi_{11}$	$V=V_{19}, \Phi = \Phi_{19}$
135-179 deg	$V=V_4$ , $\Phi=\Phi_4$	$V=V_{12}, \Phi=\Phi_{12}$	$V=V_{20}, \Phi = \Phi_{20}$
180-224 deg	$V=V_5, \Phi=\Phi_5$	$V=V_{13}, \Phi = \Phi_{13}$	$V=V_{21}, \Phi=\Phi_{21}$
225-269 deg	$V=V_6$ , $\Phi=\Phi_6$	$V=V_{14}, \Phi = \Phi_{14}$	$V=V_{22}, \Phi = \Phi_{22}$
270-314 deg	$V=V_7$ , $\Phi=\Phi_7$	$V=V_{15}, \Phi = \Phi_{15}$	$V=V_{23}, \Phi = \Phi_{23}$
315-360 deg	$V=V_8$ , $\Phi=\Phi_8$	$V=V_{16}, \Phi = \Phi_{16}$	$V=V_{24}, \Phi = \Phi_{24}$

7ig. 68





900

902

SELECT A SIGNAL HAVING AN AC COMPONENT HAVING A FREQUENCY WHICH RESULTS IN AT LEAST EIGHT SUM SIGNALS PER REVOLUTION OF THE DISC

<u>904</u>

ADJUST AMPLITUDE OF AC COMPONENT AND DC OFFSET TO MOVE OPTICS THROUGH FOCUS POINT IN EACH DIRECTION EVERY AC SIGNAL

906

APPLY THE SIGNAL TO THE ACTUATOR AS THE OPTICAL DISC TURNS

908

RECORD, INTO THE VOLTAGE LOOK-UP TABLE, A VOLTAGE WHICH WAS APPLIED TO THE ACTUATOR AND RESULTED IN A SUM SIGNAL PEAK

910

LINK, WITHIN THE LOOK-UP TABLE, THE RECORDED VOLTAGE WITH AN ASSOCIATED ANGLE AND AN ASSOCIATED RADIUS

912

ADJUST THE RECORDED VOLTAGE BY A PHASE SHIFT CORRESPONDING TO A LAG TIME ASSOCIATED WITH THE OPERATION OF THE ACTUATOR

1000 —

#### 1002

PRINT AN IMAGE ONTO AN OPTICAL DISC HAVING APPROPRIATE CHARACTERISTICS BY FOCUSING THE LASER WITH THE OPTICS

# 1004

APPLY SIGNAL TO THE ACTUATOR
ACCORDING TO THE DATA PROFILE TO
FOCUS THE OPTICS

## 1006

APPLY SIGNAL TO THE ACTUATOR ACCORDING
TO INTERPOLATED DATA

#### 1008

OPTION 1: INTERPOLATE ACTUATOR
INPUT SIGNALS ACCORDING TO
ANGULAR ORIENTATION

## 1010

OPTION 2: INTERPOLATE ACTUATOR
INPUT SIGNALS ACCORDING TO RADIAL
ORIENTATION

#### 1012

ADJUST THE PHASE OF AN AC COMPONENT OF A SIGNAL SENT TO THE ACTUATOR

## 1014

OPTION 1: APPLY A PHASE LEAD FILTER TO THE AC SIGNAL SENT TO THE ACTUATOR

#### 1016

OPTION 2: DIRECT THE PHASE LEAD FILTER TO USE DIFFERENT PHASE SHIFTS, DEPENDING ON ACTUATOR FREQUENCY